# Exploring the Consequences of Work Engagement: Relations Among OCB-I, LMX and Team Work Performance

İşe Adanmışlığın Sonuçlarını Keşfetmek: İş Arkadaşlarına Yönelik Örgütsel Vatandaşlık Davranışı, Lider-Üye Etkileşimi ve Takım Performansı İlişkileri

Mine M. AFACAN FINDIKLI<sup>1</sup>

#### ABSTRACT

Engaged employees are key human resources that help organizations sustain their competitive positions. The related literature has predominantly treated work engagement as an outcome variable. Going beyond this context, this research explores the consequences of work engagement. By investigating the outcomes, two important relational mechanisms namely LMX, OCB-I and one performance outcome, team work performance are introduced. Using full-time assessors from an HR consultancy company located in Istanbul, this research tests a moderated mediation mechanisms where LMX and OCB-I are relational resources that link work engagement to team work performance. Results revealed that engaged employees who enjoy high quality LMX with their supervisors are more likely to contribute to co-workers (OCB-I) which in turn predicts enhanced team work performance.

**Keywords:** Work engagement; LMX; OCB-I; Team work performance;Trait Positive Affectivity

# **1. INTRODUCTION**

In today's innovation driven business settings, organizations are under severe pressure to develop and survive. All too often, organizations need their workforces to be active, dedicated, and full engaged in their works because the characteristic of human resources is an important aspect under such circumstances (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). In this sense, employee work engagement has received considerable scholar attention recently (e.g., Albrecht, 2010; Bakker et al. 2011; Villiersa & Standera, 2011; Brunettoa et al, 2014). Research revealed that work engagement is an important predictor of individual and organizational performance (Luthans, Youssef, & Avolio, 2007). While there are various definitions of work engagement, Schaufeli and Bakker (2010) proposed that work engagement is composed of vigor, dedication and absorption. Scholars also share the perspective

#### ÖZET

İşlerine adanmış çalışanlar, kurumların rekabet stratejilerini sürdürebilmeleri ve gelişebilmeleri için çok değerli olan insan kaynağıdır. İlgili literatür incelendiğinde önceki çalışmaların ise adanmışlık kavramını bir çıktı değişkeni olarak inceledikleri gözlemlenmektedir. Bu çalışma ise, adanmışlık kavramının çıktılarını analiz etmeyi hedeflemektedir. Bu anlamda, lider-üye etkileşimi (LMX) ve iş arkadaşlarına yönelik örgütsel vatandaşlık davranışlarının (OCB-I) aracı ve moderator etkileri analiz edilmiştir. İstanbul'da insan kaynakları alanında hizmet veren bir danışmanlık şirketinin çalışanları ile yapılan çalışmanın sonuçları, işe adanmışlığın takım performansı üzerindeki olumlu etkisini doğrulamıştır. Buna ek olarak, örgütsel vatandaşlık davranışlarının işe adanmışlık ve takım performansı ilişkisindeki aracı etkisi belirlenmiştir. Ayrıca, örgütsel vatandaşlık davranışlarının aracı etkisi, lider-üye etkileşimi yüksek olan çalışanlarda daha kuvvetli bulunmuştur.

Anahtar kelimeler: Lider-Üye Etkileşimi; Örgütsel Vatandaşlık Davranışı; Takım Performansı; İşe Adanmışlık, Olumlu duygulanım özelliği.

that work engagement involves feelings of energy and high levels of involvement in work (Scrima et al., 2014; Bakker et al., 2011; Bakker & Leiter, 2010; Macey & Schneider, 2008).

Previous research has mainly examined the consequences of work engagement (Bakker & Demerouti, 2007). Accordingly, studies showed that engaged employees show proactive behaviors (Sonnentag, 2003), enhanced work performance (Bakker, 2009), and show discretionary behaviors directed at their organizations (e.g., OCB-O; Schaufeli et al 2006). In addition to these direct effects, research emphasized certain mechanisms linking work engagement to employee outcomes. These have been job (e.g., complexity), personal (e.g., self-efficacy) and cognitive resources (e.g., regulation strategies). Most of these mechanisms focus on the focal employee, excluding others. Yet, employees are also engaged with others in same work settings. As such, supervisors and team-mates are most important sources with whom employees communicate to get their work done. Accordingly, the central purpose of this research aims to investigate mechanisms linking work engagement to work performance at team level.

This research combines the role of supervisors and co-workers as relational mechanisms that transfer the effects of work engagement over team performance. More specifically, the role of supervisors is captured with quality of LMX and OCB-I explain the helping behaviors of the focal employee towards team mates. Through a moderated mediation model, findings of this study show that engaged employees who enjoy high quality relations with their supervisors are more likely to invest in their interpersonal resources as OCB-I. This is in line with conversation of resources theory (Hobfoll, 2002) which suggests that individuals are likely to preserve their resources for future circumstances. Helping behaviors, in turn, help predicting team performance.

This research contributes to our understanding of work engagement via underpinning the role of interpersonal resources as mechanisms directing the effects of work engagement over team performance. While previous research emphasized the role of interpersonal interactions as important resources (Hobfoll, 2002), they have not been linked to work engagement. Via showing that high quality relations drive engaged employees to help co-workers with their tasks, this research expands the consequences of work engagement. Moreover, findings showed that engaged employees are not only beneficial to themselves, but they also take steps to help coworkers which explains enhanced team performance in the end. Overall, research on work engagement is expanded via integrating relational mechanisms and team work performance.

The structure of this research is as follows. First, theory and hypotheses are introduced. Following this part, method is discussed. Procedures, sample characteristics and measures are emphasized. Afterwards, findings are presented in line with the hypotheses. The paper ends with discussions that emphasize theoretical and practical contributions as well as limitations and further research avenues.

# 2. THEORY AND HYPOTHESES DEVELOPMENT

#### 2.1. Work Engagement and OCB-I: The Moderating Role of LMX

Work engagement refers to a positive state of mind at work that is characterized by vigor, dedication and absorption (Schaufeli & Bakker, 2010). In es-

sence, components of work engagement emphasizes the energetic and fulfilling side of work (vigor), the significant pursuits while working (dedication) and a part of their life on which they are fully focused (absorption). Previous research has revealed that work engagement has positive effects over a broad range of behavioral and attitudinal outcomes. For instance, research showed that engaged employees perform better (Demerouti & Cropanzano, 2010; Salanova et al., 2005; Bakker and Demerouti, 2009) because they usually experience positive emotions including happiness, joy, and enthusiasm. These positive affective states broaden and build one's resource and lead to enhanced work performance (Fredrickson, 2001). Recent studies also showed that work engagement is an important predictor of learning behavior (Bakker & Demerouti, 2009), personal initiative, innovation (Hakanen et al., 2008), proactive behaviors (Sonnentag, 2003) and personal development (Hyvonen et al., 2009). While previous research established the positive influence of work engagement over performance related outcomes, there is lack of research regarding the question how work engagement shapes employee discretionary behaviors.

Organization citizenship behaviors are discretionary, meaning that employees contribute with their good citizenship behaviors under contexts of their own preferences (Anand et al., 2010). Employees can choose the ways in which they show citizenship behaviors which is different from performance related outcomes. OCB behaviors can be directed at co-workers (OCB-I), aimed at providing helps to co-workers. OCB behaviors can also target organizations (OCB-O) which encompasses helping behaviors towards the general organization such as following rules, and defending the organization to outsiders (Williams & Anderson, 1991). In this research, the focus is on citizenship behaviors directed at co-workers. In business settings where most of the work is accomplished in teams, interactions with co-workers are critical sources of success. Engaged employees feel energetic about their works (vigor), value what they do (dedication) and concentrate on their current jobs (Xanthopoulou et al. 2009). Preceding researches showed that engaged employees are likely to transfer their engagement to co-workers and connect with them to receive feedback (Bakker & Demerouti, 2009; Bakker & Xanthopoulou, 2009). As engaged employees are happy, productive and concerned with the overall performance of the team, they are likely to improve their co-workers' motivation. The first hypothesis of this study is set as below:

Hypothesis 1: There is positive association between

# work engagement and helping behaviors directed at co-workers (OCB-I).

Leader-member exchange (LMX) theory suggests that a manager does not establish same relationships with every subordinate (Blau, 1964; Cropanzano & Mitchell, 2005). Accordingly, LMX between a subordinate and a supervisor can be between high and low quality. High quality LMX relationships are characterized by positive aspects such as trust, mutual development whereas low quality LMX relationships usually lack these positive aspects. An employee who enjoys high quality relationships with his or her supervisor seeks to preserve it (Hobfoll, 2002). In contrast, an employee who has a low quality relationship with his or her supervisor seeks to enhance it or avoid it. Considering LMX as interpersonal resources an employee has, it can be argued that high LMX strengthens the relationship between work engagement and OCB-I.

As employees interact with their supervisors constantly, relationship with supervisors is crucial for the employee to conduct his / her task (Gerstner & Day, 1997; Scandura, 1987). As such, supervisors are usually main agents regarding work distribution and other important decisions (Hochwarter, Ferris, Zinko, James, & Platt, 2007). Therefore, employees who enjoy high quality LMX relationships are expected to be more engaged with their tasks. Moreover, engaged employees in high LMX relationship are expected to help their coworker more compared to engaged employees in low LMX relationship. This is mainly because engaged employees with high quality LMX are concerned about preserving their interpersonal resources (e.g., LMX; co-worker relationships) and one way is to engage in citizenship behaviors directed at team mates (OCB-I). Moreover, helping team mates is a tool to improve team performance which is a concern for supervisors. Taking into account these arguments, the second hypothesis of this study is stated as below.

Hypothesis 2: Quality of LMX relationship moderates the relationship between work engagement and OCB-I; as such this relationship is stronger for employees who experience higher quality LMX compared to employees who experience lower quality LMX.

#### 2.2. The Relationship Between Work Engagement and Team Work Performance: The Mediating Role of OCB-I

In today's work settings, most of the work is done by team settings (Griffin et al., 2007; Borman & Motowidlo, 1993). As most of the tasks are interdependent, performance of one employee influences the performance of overall team. We argue that helping behaviors (OCB-I) directed at team mates help drive the team performance. Previous research has shown that work engagement is an important predictor of work performance (Bakker, 2009). In order to explain this mechanism, we investigate the mediating role of OCB-I, in linking work engagement to team level work performance. Engaged employees are not only high performers but they are also concerned about the work-related wellbeing of their colleagues (Schauffeli, 2006). Expanding help not only drives performance of the focal employee, but the team mate as well as the overall team also shows better performance. Engaging in OCB-I towards co-workers in same team creates a resourceful and positive work environment, which are critical for high performing teams. Building mainly on positive organizational psychology, it is argued that OCB-I is indirectly links the effects of work engagement to team performance. The third hypothesis is stated as below:

Hypothesis 3: OCB-I directed towards team mates mediate the positive relationship between work engagement and team performance.

Taken together, hypotheses 2 and 3 involve a moderated mediation process (Baron & Kenny, 1986; MacKinnon, 2008; MacKinnon & Fairchild, 2009; Muller, Judd, & Yzerbyt, 2005), where the strength of the mediation described between work engagement and team performance is moderated quality of LMX relationship.

Hypotheses 4: The mediation mechanism between work engagement and team work performance is moderated by quality of LMX relationship; such that this mediation is stronger for employees who experience high quality LMX relationship.



Figure 1: Proposed Model

#### 3. METHOD

#### 3.1. Procedure

Participants of this study constitute of full-time working employees (assessors) in an HR consultancy company located in Istanbul, Turkey. After having obtained the consent of the general manager, an on-line survey is prepared on Qualtrics. The link of the survey is sent to all full-time employees of the company. The e-mail emphasized full confidentiality and anonymity of the responses. Two-week period was given to participants to complete their surveys. A total of 245 employees received on-line link to the survey. In the end, 189 full-responses were retrieved, representing a response rate of 78 %. Among respondents, 56 % were male. They worked for 2.3 years on average for their current jobs.

#### 3.2. Measures

All items were measured on a 5-point Likert scale. Work engagement, OCB-I and LMX were measured at individual level. Team performance was evaluated at team level. To evaluate team performance at team level, we adapted the scales used at different levels (e.g., individual or organizational) to team levels, which is an approach in line with the referent-shift composition model (Tims et al., 2013; Klein et al., 2001). In this model, the basic content of the original scales stay same but the referent of the content changes across levels. In this way, it is possible to examine the agreement level of team members at the team level.

#### Work Engagement (Alpha = .89)

To measure work engagement, the scale developed by Schaufeli and colleagues (2006) is utilized. The scale is composed by three sub dimensions namely vigor (3 items), dedication (3 items) and absorption (3 items). An example is "I feel happy when I am working intensely".

#### LMX (Alpha = .92)

Quality of LMX relationship is evaluated by the scale of Liden and Maslyn (1998). The scale includes 12 items. An example is "I like my supervisor very much as a person". LMX

#### OCB-I (Alpha = .93)

The discretionary behaviors of employees directed at their co-workers were evaluated with a 4-item scale by Lee and Allen (1992). An example is "I am willing to give my time to help others who have work related problems".

#### Work Performance (Alpha = .94)

Work performance was measured utilizing the scale of Gilboa and colleagues (2008). The scale consists of 6-items. An example is "The performance of our team fluctuates from time to time". To mesure team performance, individual level items have been aggregated at team level. This approach has been previously utilized in studies that included team level studies (Tims et al., 2013).

#### 3.3. Control Variables

Demographic variables including age, gender and tenure were controlled for the analyses. They did not influence the direction and strength of the hypotheses hence; they are excluded from further analyses. Additionally, positive affectivity was controlled because employees who are high on positive affectivity can show better work performance and / or engage in extra helping behaviors directed at their co-workers. To control positive affectivity, it is utilized a single item measuring assertiveness – enthusiasm from the PANAS (Watson, Clark, & Tellegen, 1988).

#### **4. RESULTS**

#### 4.1. Validity Checks

Before testing the hypotheses, a series of confirmatory factor analyses (CFA), using AMOS 19.0 with maximum likelihood estimation (Byrne, 2001). The measurement model included all constructs (LMX, OCB-I, work engagement and team work performance). All the items were restricted to load onto their priori theoretical models. To assess model fit, established recommendations have been followed (Hu & Bentler, 1998; Kline, 2005; MacCallum, Browne, & Sugawara, 1996; Browne & Cudeck, 1993). The findings from measurement model distinguishing among trait positive affectivity, LMX, work engagement, OCB-I, and team work performance showed acceptable fit ( $\chi 2 = 853.696$ , df = 424,  $\chi 2/df = 1.99$ , p <.01; IFI = .92; CFI = .94; TLI = .91; RMSEA = .05). This model demonstrated that all constructs were distinct from each other and they showed fit to theory. Moreover, as shown in Table 1, this model showed a better fit compared to an alternative model that did not include trait positive affectivity.

|   | χ2      | df  | χ2/df | IFI | CFI | TLI | RMSEA |
|---|---------|-----|-------|-----|-----|-----|-------|
| Measurement Model (Distinguishing among five study variables) | 853.696 | 424 | 1.99  | .92 | .94 | .91 | .05   |
| Alternative Model   | 858.052 | 394 | 2.17  | .93 | .95 | .91 | .06   |

Notes. N = 189

Alternative Model = The measurement model without trait positive affect.

 $\chi^2$  = chi-square discrepancy; d.f. = degrees of freedom;  $\chi^2/d.f.$  = relative chi-square; IFI = incremental fit index; TLI = Tucker Lewis index; CFI = comparative fit index; RMSEA= root mean square error of approximation. \*p<.05; \*\*p<.01

|   |                            | Mean | S.D. | 1     | 2     | 3     | 4     | 5     |
|---|----------------------------|------|------|-------|-------|-------|-------|-------|
| 1 | Trait Positive Affectivity | 3.69 | 1.24 | N.A.  |       |       |       |       |
| 2 | Work Engagement            | 3.79 | .52  | .21*  | (.89) |       |       |       |
| 3 | LMX                        | 3.90 | .92  | .27** | .19** | (.92) |       |       |
| 4 | OCB-I                      | 3.35 | .80  | .21** | .32** | .28** | (.93) |       |
| 5 | Team Work Performance      | 3.55 | .70  | .25** | .26** | .16*  | .16*  | (.94) |

Table 2. Means, Standard Deviations, Reliabilities and Correlation Values

Note. \*\* p < .01, \* p < .05.

Reliabilities are along the diagonal in parentheses, where applicable. <sup>a</sup> The reliability value of trait positive affectivity is not calculated as it is composed of one item.

#### 4.2. Hypotheses Testing

Table 2 presents mean, standard deviation and correlation patterns among our study constructs. The mean responses of all study variables ranged between 3.35 (s.d=.80, for OCB-I) and 3.90 (s.d=.92, LMX). Pearson bi-variate correlation patterns across measures of constructs were differed in terms of strength and significance. The range of correlation values was between  $r = .16^*$  (between Team work performance and LMX; OCB-I) and  $r = .32^{**}$  (between OCB-I and Work engagement).

To test hypotheses, structural equation modeling (SEM) is used. It enables testing of relationships among multiple variables simultaneously (Hall, Snell, & Foust, 1999). Hypothesis 1 predicted a positive relationship between work engagement and OCB-I. After controlling for trait positive affectivity, results confirmed this hypothesis ( $\beta = .32$ , p < .01).

Hypothesis 2 predicted that LMX moderate the

positive relationship between work engagement and OCB-I. To test this hypothesis, procedures suggested by Aiken and West (1991; see also Cohen, Cohen, West, & Aiken, 2003) are followed. Control variables, independent and moderator variables are mean-centered to predict the dependent variable. To interpret the results from these regression analyses, slopes between work engagement – OCB-I are plotted at one standard deviation above and below LMX. Analyses showed that both work engagement ( $\beta = .32$ , p = .00) and LMX ( $\beta = .21$ , p = .00) significantly predicted OCB-I. The interaction term also significantly explained variance in OCB-I,  $\beta$  = .14, p =.03, which supports hypothesis 2. The slope was positive and significantly different from zero at high LMX ( $\beta$  = .44, p =.00) and less-significant when LMX was low ( $\beta = .12$ , p =.04). An addition in interaction term increased the variance of OCB-I from r2 = .06 to r2 = .12, p = .02. (Please refer to Figure 2 and Table 3 for the results)

| Steps                      | Step 1 |     | Step | Step 2 |     |     | Step 3 |        |     |     |     |        |
|----------------------------|--------|-----|------|--------|-----|-----|--------|--------|-----|-----|-----|--------|
|                            | В      | SE  | β    | Т      | В   | SE  | β      | t      | В   | SE  | β   | t      |
| Step 1: Control Variables  |        |     |      |        |     |     |        |        |     |     |     |        |
| Trait positive affectivity | .12    | .04 | .22  | 3.30** | .11 | .04 | .19    | 2.78** | .10 | .04 | .17 | 2.51** |
| Step 2: Independent Var.   |        |     |      |        |     |     |        |        |     |     |     |        |
| Work Engagement            |        |     |      |        | .32 | .09 | .11    | 3.55*  | .18 | .05 | .08 | 2.21** |
| LMX                        |        |     |      |        | .21 | .04 | .23    | 3.28** | .15 | .09 | .22 | 2.87** |
| Step 3: Interaction        |        |     |      |        |     |     |        |        |     |     |     |        |
| Work Engagement * LMX      |        |     |      |        |     |     |        |        | .14 | .05 | .14 | 2.18*  |

Table 3. Regressions for LMX and Work Engagement as Predictors of OCB-I

Note. \*\* p < .01, \* p < .05.

In the first step, the control variables explained significant variance in OCB-I,  $r^2 = .06$ , p < .001. In the second step, the addition of LMX and work engagement explained significant variance,  $r^2 = .10$ , p < .001. The addition of the interaction term increased the variance to  $r^2 = .12$ , p < .01.



Figure 2: Moderation of LMX and Work Engagement predicting OCB-I

Hypothesis 3 predicts the mediation of OCB-I between work engagement and team work performance. Bootstrapping approach is utilized to test the significance of the indirect effect (Shrout & Bolger, 2002). There is significant mediation when the confidence intervals do not contain zero. Results indicated that OCB-I mediated the effects of work engagement over team work performance (CI [0.22 / 0.38], p < .01).

Hypothesis 4 proposed a moderated mediation between work engagement and team work performance. The procedures suggested by Muller, Judd, and Yzerbyt (2005) were followed. The first criterion is that the interaction of work engagement and LMX should predict the dependent variable. Results confirmed that the interaction term between LMX and work-engagement explains team work performance ( $\beta = .18$ , p =.04). The second criterion is that the interaction term should predict the mediating variable (B = .14, p = .03) which was also confirmed in prior analyses. The third criterion is that the mediating variable should predict the dependent variable after controlling the interaction of moderator - independent variable and the interaction of moderator – mediating variable. This criterion was also met ( $\beta = .21$ , p =.03). Finally, the relationship between the interaction term (work engagement and LMX) and team performance should be decreased significantly when the mediating variable is present. This relationship decreased from  $\beta$  = .14, p =.001 to  $\beta$  = .09, p =.25, supporting hypothesis 4. A Sobel test using the critical values suggested by MacKinnon, Lockwood, Hoffman West, and Sheets (2002) showed that this decrease was statistically significant (Z = 3.68, p <.01). Thus, OCB-I mediated the relationship between work engagement and team performance.

| Steps                      | Step 1 |     |     |        | Step 2 |     |     |        |  |
|----------------------------|--------|-----|-----|--------|--------|-----|-----|--------|--|
|                            | В      | SE  | В   | Т      | b      | SE  | β   | t      |  |
| Step 1: Control Variables  |        |     |     |        |        |     |     |        |  |
| Trait positive affectivity | .18    | .05 | .26 | 3.48   | .17    | .05 | .25 | 3.32** |  |
| LMX                        | .14    | .06 | .18 | 2.65*  | .12    | .06 | .16 | 2.33*  |  |
| Work Engagement            | .25    | .06 | .37 | 4.30** | .22    | .06 | .33 | 3.78** |  |
| Work Engagement * LMX      | .14    | .04 | .19 | 2.55*  | .11    | .07 | .09 | .57    |  |
| OCB-I * LMX                | .16    | .07 | .19 | 3.26*  | .14    | .05 | .17 | 3.13*  |  |
| Step 2: Antecedents        |        |     |     |        |        |     |     |        |  |
| OCB-I                      |        |     |     |        | .21    | .08 | .17 | 2.09*  |  |

Table 4. Regressions for OCB-I as Predictors of Team Work Performance

Note. \*\* p < .01, \* p < .05.

In the first step, the control variables explained significant variance in OCB-I,  $r^2 = .33$ , p <.001. In the second step, the addition of obtained I-deals increased the variance to  $r^2 = .36$ , p <.01.

# 5. CONCLUSIONS

This study attempted to test the predictive power of work engagement over team work performance through the mediation of citizenship behaviors directed at co-workers (OCB-I). Moreover, this study also explored the moderating role of LMX in the relationship between OCB-I and work engagement. Overall, by testing a moderated mediation model over team work performance, this study contributes to literature by different ways.

Previous researches established the link between work engagement and OCBs (Schaufeli et al. 2006). However, our research associated work engagement with OCB-I which is directed at co-workers. Thus, it brings a novel perspective. Additionally, previous researches also associated work engagement to performance by individual level (Demerouti & Cropanzano, 2010; Bakker et al., 2004; Salanova et al., 2005). However, most of the previous researches examined work engagement – performance relationship at individual level. Our study contributes to this line of research via discussing work performance at the team level.

A first contribution this study is related with OCB-I and LMX. Via exploring the predictive power of work engagement over LMX and OCB-I, this study expanded the interpersonal boundary conditions of work engagement (Xanthopoulou et al., 2009; Bakker, 2009). LMX represents relationship quality with supervisors whereas OCB-I emphasizes the connection of the focal employee with co-workers (Anand et al., 2010). It is seen that high guality relationships with managers support and encourage helping behaviors towards co-workers (Liden & Maslyn, 1998). Engaged employees, therefore, transfer their overall engagement to co-workers, especially when they experience high quality relationship with their supervisors (Bakker et al., 2010). This adds to previous researches, which predominantly linked work engagement to performance related outcomes (Bakker et al., 2011).

A second contribution of this study is related to team performance as dependent variable (Griffin et al., 2007). Evaluation of team performance is especially important in today's team contexts, where most of the work is completed interdependently (Gilboa et al., 2008). In other words, work teams dominate business environment. Moving beyond individual performance, this study included team performance as an important consequence of work engagement. Results showed that via helping team mates (OCB-I) and under conditions of high LMX, work engagement leads to enhanced team work performance. Overall, this study included and emphasized the role of interpersonal relations (LMX and OCB-I) as predictors of work performance. Previous research did not explicitly link work engagement to team performance, especially via the moderated mediation model of interpersonal relations. Yet, as revealed in this research, it is critical to engage in discretionary helping behaviors to team-mates and enjoy close relations with a supervisor to transfer and link the effects of work engagement over team performance.

This research contains practicalities for managers as well. Given that most organizations try to enhance performance of their employees, achieving high work engagement is one of the most viable ways to do this. For instance, work engagement is seen as an important indicator to nominate a place as "best places to work". Findings from this research might further enhance the practical implications of work engagement. It is revealed that OCB-I and LMX are important relational contexts that transfer the positive effects of work engagement over team performance. Therefore, managers as well as HR units might try to cultivate work environments that are resourceful and supportive of high quality relationships among coworkers.

### 6. LIMITATIONS AND FURTHER RESEARCH SUGGESTIONS

There are certain limitations that need to note. The first limitation relates to the self-report nature of this data. It raises concerns about the same-source biases and therefore it may influence the results. To minimize it, certain procedural tests are carried out. Independent, mediating and dependent variables are separated in the survey. In addition to this, some statistical measures are also carried out. Series of exploratory and confirmatory factor analyses revealed that the constructs were separate and distinct from each other. Additionally, Harman test showed that overall variance have explained by one construct was 25%, further supporting that there are distinct constructs. It is therefore concluded that same-source bias did not inflate our findings at great extent.

A second limitation concerns using of performance at team level. While previous research examined the responses from individuals at team level, it is advisable to collect responses from each team members so to achieve results at team level. This research included the role of co-workers from the perspective of OCB-I. Further, the research might examine how the reactions of co-workers change to engaged employees. For instance, an interesting question to examine will be the reactions of co-workers in terms of support.

This research is carried out in a single company

with the purpose of reducing the impacts of different industries. While this industrial setting is interesting, findings might prevent us from drawing generalizations based on the results. Future researches may explore the role of work engagement in a different industry. Since data is collected at once, reverse causality is still a problem. It is possible that work engagement is driven by team performance. To minimize reverse causality, it is suggested to collect data at multiple points in time. Through this way, effects will be reversed. Further research should also examine the role of cross-cultural differences in explaining the link between work engagement and team performance outcomes. Relationships supervisors and with co-workers can change in different cultures (such as in high-power distance cultures, employees might find it challenging and difficult to relate to co-workers and / or to leaders).

Work engagement is one of the most crucial concerns for managers, organizations and all employees. In line with previous research which revealed the positive effects of work engagement over various outcomes, this research showed that engaged employees are also drivers of enhanced team performance. Emphasizing the importance of relational dynamics (LMX and OCB-I), findings of this study showed that engaged employees are likely to transfer their engagement over their leaders / co-workers which in turn, breed further team performance. These findings open new areas of research in work engagement, team performance fields and contribute to our overall understanding of what drives can improve team performance.

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